



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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Salt Lake City, Utah 84180-1203

801-538-5340

January 23, 1989

CERTIFIED RETURN RECEIPT
P 001 861 857

Mr. Jerry Glazier
5M, Incorporated
P.O. Box 752
Hurricane, Utah 84737

Dear Mr. Glazier:

Re: Supplemental Review of Final Reclamation Plan, 5M, Incorporated,
Silver Reef Mine, M/053/002, Washington County, Utah

On August 11, 1988, the Division sent you a letter concerning our review of your April 25, 1988 final reclamation plan proposal for the Silver Reef Mine. In the letter we indicated that before the Division could grant tentative approval to 5M Incorporated (5M), we would need a written concurrence from 5M to the conditions as outlined in the August 11th letter.

On September 15, 1988, Division staff members met with you at the minesite to discuss outstanding permitting issues. A subsequent field inspection was conducted on December 1, 1988 to help the technical staff finalize the reclamation surety estimate for the Silver Reef Mine. The Division's reclamation estimate is now completed and totals \$102,000 (in 1993 dollars). A detailed cost breakdown is attached for your reference. In addition to the conditions attached to our August 11th letter (copy attached), 5M must also provide the Division with a reclamation surety. This must occur before final approval can be granted and a permit issued to reactivate mining operations at the minesite.

It is our understanding that 5M is pursuing the forfeited \$55,210 Kerley Industries reclamation bond in civil court. Assuming that litigation has commenced to resolve this issue, the Division will only require that 5M post a reclamation surety of \$46,790 until a legal resolution is reached. If this issue has not been resolved within six months from the date of this letter, then 5M will be required to post the additional \$55,210 reclamation surety. Please copy the Division with court documents to confirm diligent pursuit of this claim.

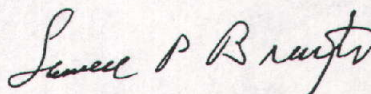
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Mr. Jerry Glazier
M/053/002
January 23, 1989

As previously outlined in Division letters dated March 10, 1988 and April 4, 1988, to 5M, Inc., the operator will have 60 days following the Division's issuance of tentative approval of the reclamation plan to post the reclamation surety. The \$46,790 surety must be provided before final approval of the reclamation plan can be issued. Mining operations cannot recommence without an approved mining and reclamation plan from this Division.

The Division requests that 5M provide a written response to the conditions outlined in this letter and our August 11th letter by February 15, 1989. Failure to show diligence in finalizing the permit acquisition for the reclamation plan may result in issuance of an "Order to Show Cause" to 5M, Incorporated. This order would require the operator to appear before the Board of Oil, Gas and Mining and explain why the Division should not require immediate and complete reclamation of the minesite.

Thank you for your cooperation in completing this permitting action. Please contact me or D. Wayne Hedberg of my staff should you have questions or concerns regarding this review. We look forward to receipt of your written response so we may proceed with issuance of tentative approval.

Sincerely,



Lowell P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program

jb
Attachments
cc: Charlie Dietz, BWPC
Scott Spooner, BLM, Dixie Resource Area
Minerals Team
MN3/64-65

November 16, 1978 DOGM publishes formal notice for a November 29th Board hearing in response to receipt of Formal Protest from Bennett Petroleum Corp.

November 30, 1978 DOGM letter reaffirming tentative approval decision and forwarding reclamation surety estimate of \$291,720 for 60 disturbed acres and a 30-year bond period.

December 18, 1978 5-M letter responding to DOGM Nov. 30th letter. Operations to concentrate on underground development initially. Revised area of projected mining from 60 to 75 acres. Operator proposes only \$250/acre for the 75 acre mine disturbance.

December 26, 1978 DOGM letter to 5-M indicating Board request for more information regarding:

(1) Now proposing only 12 acres of 75 acres to be bonded for reclamation? Where would the 12 acres of 75 acres be located?

(2) Inflation rate must be accounted for in bond calculations.

February 2, 1979 5-M responds to December 26, 1978 DOGM letter.

February 8, 1979 Memo to file (Ron Daniels). Followed office meeting between DOGM and 5-M, discussions on bonding. Agreement reached, 5-M to pursue bonding of \$84,375 (1979 dollars) at \$1,125/acre for 75 acres. Inflation to be added to this figure.

February 13, 1979 Letter from 5-M's attorney transmitting two (2) revised maps, "Amended Mining Program, Underground, Room and Pillar, Minimal Open Pit, Open Cut, Drawing #22." Involves 75 acres, including open cut areas A, B & C. 5-M to pursue surety bonding at \$1,125/acre cost. If this fails, then an escrow surety will be pursued.

February 22, 1979 5-M letter transmits a "Bond Map" to be used during February 28th Board hearing. (75 acres proposed). Board accepted the \$1,125/acre bond figure at the hearing.

January 11, 1980 5-M transmittal letter of 1979 Annual Progress Report. Indicates 40,000 tons ore placed on asphalt leach pad. Undergoing processing.

*NOTE: NO BOND POSTED YET, OR FINAL APPROVAL INDICATED IN FILE TO COMMENCE MINING OPERATIONS.

January 22, 1980 Registered DOGM letter to 5-M regarding failure to post \$84,375 reclamation surety. Request immediate response, no mining activity permitted prior to posting of surety.

September 2, 1981 DOGM memo to file (Gil Hunt), based on August 19, 1981 field inspection. Company currently in process of negotiations for financial support. Operation is temporarily suspended. Solutions in process ponds to be processed upon reactivation. Most old shafts fenced, but some remain open. Work to date concerns removal, reprocessing and cleanup of old refuse ore stockpiles (no active mining of new ore yet?).

September 16, 1983 Registered DOGM letter to 5-M as a follow-up to an August 4, 1983 field inspection by technical staff. Noted active operations during inspection. Letter gave 30 days to post outstanding reclamation surety of \$84,375.

October 31, 1983 Registered DOGM letter to 5-M final request for reclamation surety to be received by December 2, 1983. Failure to meet deadline will result in issuance of an Order to Show Cause to revoke tentative approval.

November 7, 1983 Letter from 5-M attorney, stating client's ongoing objection to excessive bond amount and some doubts as to whether Mined Land Reclamation Act is within constitutional limits on regulating client's use of its own private patented mining claims. Propose a "reclaim-as-you-go" reclamation option, with only 10 acres of surface disturbance subject to open pit mining at any one time. Propose a "Trust Deed" form of surety to the State on valuable real estate properties. (20 acres to be deeded over). Also stated current disturbance was within 2 acre exemption category and therefore, not subject to State bonding requirements.

January 23, 1984 DOGM memo to file (Tom Tetting), follows a January 20th field inspection detailing amount of onsite disturbance associated with the operations conducted to date. Visual estimate of 12-15 acres made by technical staff. Recommend operator be brought before Board.

February 14, 1984 DOGM memo to file (Mary Boucek), follows a February 7, 1984 meeting between 5-M and DOGM to discuss lack of reclamation bond. Operator was advised that no further mining activity would be allowed to occur until a surety is posted with DOGM. Operator may post a surety for the currently disturbed acreage, plus any additional acreage to be disturbed within the permit term on a "reclaim-as-you-go" basis. Operator agreed to revise the MR-1 form to reflect current operations, delineate disturbed acreage and estimate the appropriate bond amount within 30 days for DOGM review.

February 29, 1984 DOGM memo to file (Mary Boucek), regarding February 22, 1984 phone call from Jerry Glazier (5-M, Inc.). Requested delay in submission of revised MR-1 form. 5-M in process of negotiating a joint-venture which would have an effect on plan development. Will submit map of disturbed areas and a revised bond estimate within the 30-day time frame. Management OK'd same with additional requirement to provide a date for submission of revised MR-1.

March 12, 1984 5-M response letter received. Contained current map of all surface developments 5-M had completed to date. A \$55,210 bond estimate for 42.25 acres also included.

March 21, 1984 DOGM memo to file (Pam Grubaugh-Littig), review of 5-M reclamation estimate. OK'd for 1984 dollars. A 10% inflation factor was added to yield: \$60,731 (1985), \$66,804 (1987), and \$73,485 (1987 dollars).

March 22, 1984 DOGM letter to 5-M accepting reclamation estimate and requiring immediate posting of \$55,210. Present surety would need to be escalated to cover inflationary cost for the next year or 3-year period.

May 1, 1984	DOGM memo to file (Steve Cox), regarding an onsite April 26, 1984 inspection to confirm cessation of operations.
May 1, 1984	Registered letter sent to 5-M giving operator until May 15, 1984 to post reclamation surety. Otherwise, an Order to Show Cause to be issued requiring bond posting and immediate reclamation of minesite.
May 15, 1984	A bond form and rules sent to Leavitt Insurance Agency representing 5-M, Incorporated.
May 15, 1984	DOGM sends letter to 5-M as a follow up to a phone conversation which gave extension of surety deadline until May 30, 1984.
June 5, 1984	Memo to DOGM director, discusses 5-M's failure to pose the required reclamation surety and recommendation to issue an Order to Show Cause.
June 14, 1984	Memo to file (Pam Grubaugh-Littig), presents a revised 75-acre reclamation surety estimate based on 5-M's previous (\$1306/acre) calculations for 42.25 acres. Revised 75 acre estimate equals \$98,006 (1984 dollars).
July 11, 1984	Formal petition filed by DOGM Assistant Attorney General and directed to the Board of Oil, Gas and Mining against 5-M for failure to post reclamation surety. Scheduled for August 23, 1984 hearing date.
August 23, 1984	Board Hearing. A September continuance sought by DOGM attorney on behalf of 5-M petition, due to recent circumstances regarding 5-M joint venture with Kerley Mining Company.
August 24, 1984	A \$55,210 irrevocable Certificate of Deposit sent from DOGM to State Treasurer's Office for safekeeping (submitted by Kerley Industries).
August 29, 1984	Exploration NOI application received (EXP/053/007), from Kerley Mine & Mill Engineering, Inc. for a 12 hole drilling program.

September 17, 1984 Memo from DOGM to Assistant Attorney General regarding relief request for Kerley Industries from petition filed against 5-M Inc. Bond posted by Kerley assumes all leases and properties from 5-M. Suggest March 1, 1985, deadline for submission of a new MRP prior to allowing any further mining-related activities.

October 3, 1984 Kerley Mine & Mill Engineering, Inc. submits an amended exploration notice for an additional 15 holes.

January 11, 1985 DOGM receives MR-9 forms for 26 holes (plugged). Form indicates all holes intercepted water 5-10 gpm at 100-130 ft. depth. No indication that any reclamation work performed.

April 19, 1985 DOGM forwards copy of the Act, regulations and MR-1 form to Kerley Industries. Immediate update of current development plans for the Silver Reef Property requested.

May 29, 1985 Staff memo to management regarding a May 23, 1985, field inspection of exploration program, performed in response to a citizen's complaint. Complaint concerned lack of adequate cleanup and reclamation of the exploration drill sites conducted by Kerley Industries (Mine and Mill Engineering, Inc.). Memo confirms need for some additional reclamation work.

June 12, 1985 DOGM certified letter sent to Kerley Industries requiring operator to complete required reclamation work, or address the discrepancy between DOGM field inspection and Kerley Industries MR-9 Completion Notice.

June 21, 1985 DOGM receives letter and incomplete MR-1 form from Kerley Industries. It contained supplemental information to the MRP previously submitted by 5-M. Operator indicated it was not a final NOI to commence mining operations. Complete NOI to be filed pending completion of intensive exploratory drilling on the property. Several new maps provided and supplemental text to describe current state of operations, small scale development and proposed reclamation plans.

July 19, 1985 Kerley Industries (Mine & Mill Engineering, Inc.) Exploration NOI received for 1985 drilling program. Proposal requests approval of 79 new drill holes.

July 26, 1985 DOGM letter to Mine & Mill Engineering, Inc. Exploration application determined incomplete. Request more detailed information and a response to DOGM June 12th letter before application is approved.

August 21, 1985 Memo to exploration file regarding August 19, 1985 onsite field inspection of Mine & Mill Engineering, Inc. completed 1984 exploration program and the proposed 1985 drilling program. Operator committed to perform limited regrading and reseeding work on specific areas identified by DOGM staff during inspection.

September 3, 1985 DOGM receives revised exploration map showing new locations for the proposed 1985 (75 hole) drilling program.

September 27, 1985 DOGM letter sent to Kerley Industries requesting increase in reclamation bond to provide for reclamation costs in 1986 dollars (\$59,474).

January 6, 1986 DOGM receives letter from Kerley Industries that they have terminated all interest in Silver Reef properties owned by 5-M Inc. 1985 drilling program was not conducted.

NOTE: Not known if operator ever completed the exploration reclamation work as committed to during the Division's August 19, 1985 onsite inspection??

January 15, 1986 DOGM letter sent to Kerley Industries transmitting surety bond form to replace existing Certificate of Deposit (CD). Request inflated bond to reflect reclamation costs in 1987 dollars (\$61,728).

February 10, 1986 Kerley Industries acknowledges receipt of surety bond form. Company expects to have the current audited financial statement for enclosure to DOGM by end of April. Request existing CD remain in place until then.

March 2, 1986	Article published in Deseret News concerning potential public health and safety problems and environmental consequences associated with "abandoned" Silver Reef mining operation.
March 12, 1986	Memo from technical staff to DOGM management concerning current status and recommendations for action against Kerley Industries and/or 5-M, Inc. for failure to comply with DOGM directives regarding completion of permitting requirements for Silver Reef Mine.
April 5, 1986	DOGM memo to file regarding February 7, 1986 field inspection of Silver Reef Mine. Water quality samples were taken by DOGM from the solution ponds. Grab samples also taken upstream and downstream of the processing site disturbance. Lab analysis of primary solution pond indicated the following concentrated values: Aluminum (275,000 ppm), Cadmium (3400 ppb), Copper (524,000 ppm), Manganese (233,700 ppm), Mercury (376 ppb), Silver (125,000 ppm) and Zinc (333,500 ppm). Lab analysis from the stream samples indicated elevated dissolved salts downstream from the upstream sample, but reduced metals concentrations. A 10 to 20 fold increase in estimated stream flow was noted at the downstream site over the upstream estimate (5 gpm vs. 50-100 gpm).
June 12, 1986	DOGM letter to Kerley Industries requesting immediate posting of escalated bond by July 1, 1986, and a written explanation of future plans for development of the Silver Reef Mine.
July 23, 1986	Staff memo to DOGM Associate Director detailing specifics behind unpermitted Silver Reef Mine and recommendation for issuance of an Order to Show Cause requiring full and complete reclamation.
August 5, 1986	Memorandum from Assistant Attorney General to DOGM Associate Director recommending that the operator be provided with the opportunity to request a hearing before the Board. If no hearing is requested, DOGM may refuse, withhold, or withdraw tentative approval of the Notice of Intention.

September 18, 1986 DOGM certified letter to Kerley Industries giving responsible parties 60 days, from receipt of letter, to reclaim the Silver Reef Mine site. If no reclamation conducted, DOGM will approach Board requesting bond forfeiture and reclamation by the State of Utah.

September 30, 1986 DOGM transmits file correspondence and the Mined Land Reclamation Act to Kerley Industries legal counsel as per their request.

November 6, 1986 State Health letter to 5-M, Inc. requesting written proof and documentation of company's receipt of State Health approval for the process containment ponds. Also indicates a joint state agency inspection scheduled for November 21, 1986.

November 28, 1986 DOGM memo to file based upon November 21, 1986 joint agency site inspection of Silver Reef Mine. Water samples were collected by State Health and pH measurements taken of the process ponds. Water Resources representatives verified drainages in and around mine site to note if they drained to the Quail Creek Reservoir. Abandoned Mine Reclamation personnel confirmed shafts and adits noted on USGS map within proposed mine development area.

December 29, 1986 Staff memo to Program Administrator, follow up to DOGM September 18th letter to Kerley Industries which required mine site reclamation within 60 days. Apparent confusion as to ultimate reclamation responsibility, 5-M or Kerley Industries. Clarification requested. Brief chronology attached to memo.

February 10, 1987 Staff memo to file regarding phone conversation with Arizona bank holding Certificate of Deposit for Kerley Industries. \$10,228 in interest had accrued on the \$55,210 bond and it was paid to Kerley Industries on February 3rd.

February 27, 1987 Letter from State Health sent to 5-M Inc., again requesting design plans for the waste water ponds constructed on the Silver Reef mine site.

March 19, 1987 Staff memo to file, discussing best estimate to reclaim the approximate 12 disturbed acres associated with the processing area at the Silver Reef Mine site.

April 8, 1987 Memorandum to DOGM Director from Assistant Attorney General detailing bond forfeiture procedures of Kerley Industries reclamation bond.

July 17, 1987 Staff memo to Program Administrator discusses results of investigations made by DOGM technical staff in response to Administrator's July 13, 1987 memo regarding pre-reclamation resolution to outstanding concerns.

July 21, 1987 Memorandum to DOGM Director from Assistant Attorney General enclosing a cashier's check for \$55,210 from Kerley Industries for reclamation of the Silver Reef Mine. Recommendation made to proceed with an Order to Show Cause or a petition against 5-M, Inc.

September 3, 1987 State Health response letter to 5-M, Inc. details deficiencies outlined in plans submitted for their review. Request made for additional detailed design information of as-built mining operation and processing facilities.

March 10, 1988 Follow-up to a February 17, 1988 onsite meeting with the operator. Certified DOGM letter to 5-M, Inc. details requirements that must be met in order to maintain the Silver Reef Mine site in the current state of suspended operations.

March 25, 1988 5-M, Inc. response to DOGM's March 10, 1988 letter. Included a reclamation plan for the mine site involving the current onsite facilities and mine development. A petition to the Board of Oil, Gas and Mining was also received (improperly formatted) requesting that the forfeited Kerley Industries bond be used to defer some of 5-M, Inc. reclamation bonding obligation.

April 4, 1988 Staff memo to file, details results of a March 31, 1988 field inspection with 5-M, Inc. representatives. Operator had initiated cleanup of the minesite and presented DOGM staff with copies of the March 25, 1988 reclamation package (as noted above). The operator committed to forward, within 2 weeks, Addendum D, which would cover ultimate final reclamation of the mine site.

April 7, 1988	DOGM letter to 5-M, Inc. sent as follow-up to discussions and commitments made by operator during the March 31, 1988, onsite inspection. Indicated petition to Board must also be reformatted.
April 27, 1988	DOGM receives, Addendum D, Final Reclamation Plan supplement, from 5-M, Inc.
May 10, 1988	DOGM memo to file, details follow-up to May 6, 1988 onsite inspection. Cleanup work not completed yet, but progress is being made.
August 11, 1988	DOGM forwards <u>Conditional</u> Tentative Approval letter to 5-M, Inc. as a result of technical review of operator's recent final reclamation plan.
September 26, 1988	Memo to file as a follow-up to September 15, 1988 onsite inspection with operator. Memo detailed cleanup performed to date, discussion of DOGM Conditional Tentative Approval letter and Board's decision concerning 5-M's latest petition on Kerley Industries forfeited bond. DOGM to compute a detailed reclamation estimate for the current status of mining operations and forward same to operator.
December 1, 1988	Staff memo to file details results of field inspection to help finalize details for computing reclamation cost estimate.
January 23, 1989	DOGM forwards certified letter to 5-M, Inc. requesting written response to previous Conditional Tentative Approval letter. Request written response by February 15, 1989. Detailed DOGM reclamation estimate attached to letter (\$102,000) for current mining disturbances. Operator requested to provide additional \$46,790 reclamation surety in the interim (pending outcome of legal proceedings regarding acquisition of forfeited Kerley Industries reclamation bond).

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JERRY GLAZIER
5M INCORPORATED
P O BOX 752
HURRICANE UT 84737

4. Article Number

P 001 861 857

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P 001 861 857

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★ U.S.G.P.O. 1984-446-014

PS Form 3800, Feb. 1982

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		5M INCORPORATED
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J BURNS

DOGM

M/053/002